AMENDMENTS TO THE DRAWINGS

Please replace Figure 22B with the Replacement Sheet for Fig. 22B.

REMARKS

1. Formal Matters

a. Status of the Claims

Claims 65-68 are pending in this application. Claims 65-68 are hereby cancelled without prejudice to pursuing these claims in a continuing application. Claims 69-86 are new. Upon entry of these amendments, claims 69-86 are pending and under active consideration. Applicants respectfully request entry of the amendments and remarks made herein into the file history of the present application.

b. Amendments to the Claims

New claim 69 recites a nucleic acid consisting of 19 to 140 nucleotides, support for which may be found throughout the application including paragraphs 0045-0046 as originally filed. New claim 69 also recites that the sequence of the nucleic acid may comprise at least 19 consecutive nucleotides of SEQ ID NO: 142700, support for which may be found Table 10, lines 267-330, which in part recites:

> Nucleotide sequence of GR7405 is located from position 131248823 to position 131249168 relative to chromosome chrX on the `-` strand (chr is an abbreviation for chromosome).

The sequence of SEQ ID NO: 142700 reflects the sequence of the above-cited chromosome position as available from the current version of the human genome.

Claim 69 is also amended to recite that the nucleic acid may be: an RNA equivalent of (a), support for which may be found in the application as originally filed including at paragraph 0047 as originally filed.

Claim 69 is also amended to recite that the nucleic acid may be: a sequence at least 92/131 identical to (a) or (b), support for which may be found at Table 4, lines 1215-1222 as originally filed. GR7405 (represented by SEQ ID NO: 142700) encodes hsa-miR-18b (represented by SEQ ID NO: 140670). hsa-miR-18b forms a hairpin, as shown at Table 4, lines 1215-1222 of the application as originally filed. The sequence of hsa-miR-18b (SEQ ID NO: 140670) is 131 nucleotides in length. Within the predicted hairpin formed by the nucleic acid of SEQ ID NO: 140670, 92 complementary nucleotides are paired.

Claim 69 is also amended to recite that the nucleic acid may be: the complement of any one of (a)-(c), support for which may be found at paragraph 0047 of the application as originally filed.

New claim 70 recites the nucleic acid of claim 69, wherein the at least 19 nucleotides is of a sequence selected from the group consisting of SEQ ID NOS: 140670 and 140732, support for which can be found at Table 4, lines 1215-1222 and 1628-1632 of the application as originally filed.

New claim 71 recites a nucleic acid of claim 69, wherein the nucleic acid consists of 19 to 24 nucleotides, support for which can be found at claims 1-3 as originally filed.

New claim 72 recites a nucleic acid with a sequence consisting of (a) SEQ ID NO: 142700 (b) an RNA equivalent of (a); (c) a sequence at least 92/131 identical to (a) or (b); or (d) the complement of any one of (a)-(c), support for which may be found as described above for new claim 69.

New claim 73 recites a nucleic acid of claim 69, wherein the at least 18 nucleotides is of a sequence selected form the group consisting of SEQ ID NOS: 140670-140732, support for which can be found as described for new claim 70.

New claim 74 recites a nucleic acid of claim 72, wherein the nucleic acid consists of 19 to 24 nucleotides, support for which can be found as described for new claim 71.

New claim 75 recites a nucleic acid of claim 70, wherein the nucleic acid is an RNA, support for which can be found at paragraph 0047 of the application as originally filed.

New claim 76 recites a nucleic acid of claim 73 wherein the nucleic acid is an RNA, support for which can be found at paragraph 0047 of the application as originally filed.

New claim 77 recites a nucleic acid of claim 75, wherein the nucleic acid is capable of modulating expression of a target gene, support for which can be found at paragraph 0047 of the application as originally filed.

New claim 78 recites a nucleic acid of claim 76, wherein the nucleic acid is capable of modulating expression of a target gene, support for which can be found at paragraph 0047 of the application originally filed.

New claim 79 recites a nucleic acid of claim 77, wherein the nucleic acid is at least 14/22 complementary to a binding site sequence of 19 to 24 nucleotides of a target gene, support for which may be found at Table 7, lines 188035-188829, which show that among all listed target

binding sites of the nucleotide represented by SEQ ID NO: 140670, the sequence of which is included in the sequence of SEQ ID NO: 142700, at the lowest level of complementarity a target binding site of 22 nucleotides has 14 nucleotides complementary to the sequence of SEQ ID NO: 140670. New claim 79 also recites that the binding site sequence is located in an untranslated region of RNA encoded by the target gene, support for which can be found at paragraph 0047 of the application as originally filed.

New claim 80 recites a nucleic acid of claim 78, wherein the nucleic acid is at least 14/22 complementary to a binding site sequence of 19 to 24 nucleotides of a target gene and wherein the binding site sequence is located in an untranslated region of RNA encoded by the target gene, support for which can be found as described for new claim 79.

New claim 81 recites a vector comprising an insert, wherein an insert consists of the nucleic acid of claim 69, support for which can be found at paragraphs 0039-0041 of the application as filed.

New claim 82 recites a vector comprising an insert, wherein an insert consists of the nucleic acid of claim 72, support for which can be found at paragraphs 0039-0041 of the application as filed.

New claim 83 recites a probe comprising an insert, wherein an insert consists of the nucleic acid of claim 69, support for which can be found at paragraphs 0039-0041 of the application as filed.

New claim 84 recites a probe comprising an insert, wherein an insert consists of the nucleic acid of claim 72, support for which can be found at paragraphs 0039-0041 of the application as filed.

New claim 85 recites a gene expression inhibition system comprising the vector of claim 81 and a means for inserting said vector into a cell, support for which can be found at paragraphs 0038, 0047, and 0174-0175 as originally filed.

New claim 86 recites a gene expression inhibition system comprising the vector of claim 82 and a means for inserting said vector into a cell, support for which can be found at paragraphs 0038, 0047, and 0174-0175 as originally filed.

c. Amendments to the Specification

At page 2 of the Office Action, the Examiner alleges that Figures 21A, 22A, 23A, and 23C do not comply with 37 C.F.R. § 1.821-1.825. Applicant respectfully points out that none of

these Figures disclose sequences and therefore do not require SEQ ID NOS. Applicant believes that the Examiner may have identified said Figures in error. Applicant believes that these Figures comply with 37 C.F.R. § 1.821-1.825. Hence no amendments are made to Figures 21A, 22A, 23A, and 23C, nor to the paragraphs in the Specification that refer to said Figures.

Paragraphs 0313-0316 are amended to assign SEQ ID NOS: 142673-142681 to the listed sequences in compliance with 37 C.F.R. §§ 1.821-1.825. Paragraphs 0313-0316 are also amended to correct typographic errors.

Paragraph 0323 is amended to assign SEQ ID NOS: 142688-142698 to the listed MIRs, GAMS, and controls with sequences represented in Fig. 23B in compliance with 37 C.F.R. §§ 1.821-1.825.

Paragraph 0328 is amended to assign SEQ ID NO: 142699 to the sequence shown in Fig. 24A in compliance with 37 C.F.R. §§ 1.821 - 1.825.

Paragraph 0337 is amended to assign SEQ ID NOS: 142682-142687 in compliance with 37 C.F.R. §§ 1.821 - 1.825.

d. Amendments to the Drawings

Figure 22B is amended by replacing it with a Replacement Sheet for Fig. 22B to assign SEQ ID NOS: 142622-142672 to the listed sequences in compliance with 37 C.F.R. § 1.821-1.825.

e. Elections/Restrictions

At page 3 of the Office Action, the Examiner requires election of a single sequence. Applicant elects with traverse nucleic acids related to SEQ ID NO: 142700.

The Examiner is permitted under 35 U.S.C. 121 to issue a restriction requirement between independent and distinct inventions. However, the Director has partially waived the requirements of 37 C.F.R. § 1.141 *et seq.* to permit a reasonable number of nucleotide sequences to be claimed in a single application. *See* Examination of Patent Applications Containing Nucleotide Sequence, 1192 O.G. 68 (November 19, 1996). It has been determined that normally **ten** sequences constitute a reasonable number for examination purposes absent an exceptional case. *See* MPEP 803.04.

The Examiner has failed to demonstrate that the claimed sequences are an exceptional case necessitating that the number of sequences to be selected be less than ten. Applicant respectfully submits that the Examiner is impermissibly disregarding the waiver of 37 C.F.R.

§ 1.141 *et seq.* Accordingly, Applicant respectfully requests reconsideration of the restriction requirement and the opportunity to elect up to ten sequences for further prosecution.

f. Species Election Regarding Target Genes in Group I

At page 3 of the Office Action, the Examiner requires election of a single disclosed target gene species for Group I under 35 U.S.C. § 121. Applicant elects without traverse target gene ABCC3 which has the sequence of SEQ ID NO: 51529.

2. Conclusion

Applicant respectfully submits that the instant application is in good and proper order for allowance and early notification to this effect is solicited. If, in the opinion of the Examiner, a telephone conference would expedite prosecution of the instant application, the Examiner is encouraged to call the undersigned at the number listed below.

Respectfully submitted,

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Dated: September 18, 2006

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